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ANOLIS SCRIPTUS GARMAN 1887,
AN EARLIER NAME FOR
ANOLIS LEUCOPHAEUS GARMAN 1888

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Garman in 1887 described *Anolis scriptus* on the basis of five specimens in the Museum of Comparative Zoology, giving the type locality as "Silver and Lena Keys, Fla." Barbour in 1914 re-examined Garman's type series and decided that they were identical with *Anolis cristatellus* from Puerto Rico and the Virgin Islands and therefore placed *A. scriptus* in the synonymy of *A. cristatellus*. In the course of an examination of the Museum of Comparative Zoology anoles referred to *A. cristatellus* I had occasion to study the type series of *A. scriptus*. I find that the series is mixed and none is *cristatellus*. One, a juvenile, is *A. homolechis quadroeclifer* of Cuba; the other four are conspecific with the form from the southeastern Bahamas described by Garman (1888) as *Anolis leucophacus*, and apparently subspecifically identical with the form from the Turks and Caicos Islands now called *albipalpebralis* Barbour 1916.

Clearly the name *scriptus* can no longer be kept as a synonym of *Anolis cristatellus*, but correction of its status raises certain problems. Since the series is mixed a lectotype must be selected to fix the name.

The type series, three adult males and two juveniles, are all somewhat faded from their long period of preservation. One of the juveniles possesses the scale characters of *Anolis homolechis* and the color pattern, dark spots over the shoulders, is still sufficiently evident to identify it as *Anolis homolechis quadroeclifer*. This is the specimen labeled as coming from Lena Key, which thus would appear to be Cayos de la Lena, near Cabo San Antonio, Cuba.¹ I have arbitrarily excluded this juvenile from the

¹ For further information on this form see Ruibal and Williams (1961).

concept of *A. scriptus* and it therefore needs no further discussion.

The remaining four specimens seem to belong to a single species and I herewith designate M.C.Z. No. 65950 as the lectotype of *Anolis scriptus* Garman.

The labels accompanying these specimens say "Silver Key Florida." I, like Barbour, have been unable to locate a Silver Key anywhere in the West Indies. There is a Silver Bank near the islands from which the types must have come in the south-eastern Bahamas but it is completely submerged.

These specimens are very like *cristatellus* as both Garman and Barbour agreed. Garman distinguished them from *cristatellus* on the basis of the greater size of the two paravertebral scale rows. Barbour (1914, p. 274) said, "I can not see, however, that these are at all enlarged; and there is no other character in which they vary from true *A. cristatellus*." An examination of the type series helps to explain this contradiction. Two of the males have the two paravertebral scale rows enlarged more than is usual in *cristatellus*, but the third male has the paravertebral scale rows scarcely enlarged at all and it is undoubtedly this specimen that Barbour examined.

However, a close comparison shows certain other and more constant differences between the type series of *scriptus* and the many specimens of *cristatellus* examined. In *scriptus* the dorsal scales *lateral to the paravertebral rows* are larger than they are in specimens of *cristatellus* of similar size. In *cristatellus* also, the frontal ridges are higher and sharper and the frontal depression correspondingly deeper than in the type series of *scriptus*. Finally, in *cristatellus*, there are only 1-3 scales behind the interparietal and these are abruptly larger than the very small dorsal scales. In *scriptus* there are many more rows of enlarged scales in this position and they grade more gradually into the dorsal scales.

In all of these characters the type series of *scriptus* differ from *cristatellus* and agree with specimens of the species now called *leucophaeus*. So far as I can find, the types of *scriptus* do not show any scale differences from *leucophaeus*, nor does *leucophaeus* show any additional differences from *cristatellus*.

From this it appears that *scriptus* and *leucophaeus* are synonymous and *scriptus* as the older name must be substituted for *leucophaeus*.

The species "*leucophaeus*" is quite widely distributed in the southeastern Bahamas and has been divided into four subspecies. These races have been described primarily on the basis of color pattern, and they are all very similar in scalation. They are diagnosed in Table I.

The types of *scriptus* lack the many dark spots characteristic of *leucophaeus* and the lectotype has a well-developed tail crest which is lacking in *sularum*. Thus the name *scriptus* definitely does not apply to the populations called *leucophaeus* and *sularum*.

Distinguishing between *albipalpebralis* and *mariguanae* is more difficult. The diagnostic difference between them is the presence of a broad dark lateral band in *mariguanae*. This is absent in the type series of *scriptus* but it is also absent in many of the adult males of *mariguanae* and best developed only in the juveniles and females. Even the small "type" of *scriptus* lacks this band but this specimen is so faded that one cannot be positive that the band was never present. Many of the females of *albipalpebralis* have dark middorsal blotches which are lacking in the small "type" of *scriptus* but, since they are absent in many *albipalpebralis*, this is not conclusive. The male *scriptus* have a complex mottling along the sides in addition to a light narrow lateral line. The light lateral line is found in both *albipalpebralis* and *mariguanae* but the mottling in the types of *scriptus* is most like that found in *albipalpebralis*. Finally, the lectotype of *scriptus* has a dark line running posteriorly from the eye onto the neck. This marking is found in some of the males of *albipalpebralis* but in none of the *mariguanae* examined. So far as can be determined there are no useful scale differences between *mariguanae* and *albipalpebralis*. From this it appears that the "type" series of *scriptus*, while not indisputably assignable to either of these races, is most like *albipalpebralis* and the lectotype most clearly so. For this reason it seems necessary to replace the name *albipalpebralis* by the name *scriptus*. In accordance with this change the type locality of *scriptus* is restricted from "Silver and Lena Keys" to "Silver Key," Turks and Caicos Islands. Further restriction seems pointless at this time. The correct names for the races of this species now stand as follows:

Anolis scriptus scriptus Garman 1887 = *Anolis albipalpebralis*
Barbour 1916

Anolis scriptus leucophaeus Garman 1888

Anolis scriptus mariguanae Cochran 1931

Anolis scriptus sularum Barbour and Shreve 1935

Table I. The subspecies of *Anolis scriptus*

| | leucophaeus | scriptus = albipalpebralis | mariguanae | sularum |
|--------------------|----------------------------|---|---|--|
| Range | Great and Little Inagua | Turks and Caicos Islands | Mayaguana | Atwoods Cay and West Plana Cay |
| Dorsal pattern | many small dark spots | narrow light lateral line; mottling | narrow light lateral line frequently bordered above by broad dark band | dark with salt and pepper pattern |
| Male tail crest | present | present | present | absent |

REFERENCES CITED

- COCHRAN, D.
1931. New Bahaman reptiles. Jour. Washington Acad. Sci., **21**: 39-40.
- BARBOUR, T.
1914. A contribution to the zoogeography of the West Indies, with especial reference to amphibians and reptiles. Mem. Mus. Comp. Zool., **44**: 209-359.
1916. Additional notes on West Indian reptiles and amphibians. Proc. Biol. Soc. Washington, **29**: 215-220.
- BARBOUR, T. AND B. SHREVE
1935. Concerning some Bahaman reptiles, with notes on the fauna. Proc. Boston Soc. Nat. Hist., **40**: 347-366.
- GARMAN, S.
1887. On West Indian Iguanidae and West Indian Scincidae in the collection of the Museum of Comparative Zoology, Cambridge, Mass., U.S.A. Bull. Essex Inst., **19**: 25-53.
1888. Reptiles and batrachians from the Caymans and Bahamas. Bull. Essex Inst., **20**: 103-116.
- RUIBAL, R. AND E. E. WILLIAMS
1961. The taxonomy of the *Anolis homolechis* complex of Cuba. Bull. Mus. Comp. Zool., **125**: 211-246.